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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,616

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Kevin Howitt

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12/24/2008

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EXAMINER

WILSON, BRITTANY M

ART UNIT

PAPER NUMBER

4184

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/590,616	<b>Applicant(s)</b> HOWITT, KEVIN	
	<b>Examiner</b> BRITTANY M. WILSON	<b>Art Unit</b> 4184	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-2 and 4-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/24/2006</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 12, 14, 15, 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hand et al. (WO 2000/62731 A) in further view of Shirandami et al (GB 2387321 A).

Hand et al teaches: (RE Claim 1) An emergency evacuation apparatus for use with an adjustable bed and for removing a bed-ridden person from the adjustable bed in an emergency situation, comprising a base tray having three transverse fold lines to allow the base tray to bend as-four panels defining a backrest, an intermediate panel and a knee-break, the base tray being adapted to stay on top of the adjustable bed and bend along the transverse fold lines when the profile of the adjustable bed is changed during normal use; (*Page 7 lines 25-30; Figure 1 and 2 features 170, 172, 174, and 176 are pivotable panels, 10 is the adjustable bed*)

(RE Claim 12) further comprising carrying handles secured to sides of the base tray. (*Page 7 lines 23-24 feature 166 Figure 1*)

(Re Claim 14) A combination of an adjustable bed having a plurality of panels that can bend relative to each other and an emergency evacuation apparatus for removing a bed-ridden person from the adjustable bed in an emergency situation, the

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emergency evacuation apparatus comprising a base tray having a plurality of transverse fold lines to allow the base tray to bend as a plurality of panels; *(Page 7 lines 25-30; Figure 1 and 2 features 168, 170, 172, 174, and 176 are pivotable panels, 10 is the adjustable bed)*

(Re Claim 15) wherein the base tray and the adjustable bed have the same number of panels *(Page 8 lines 1-6; Fig. 22 feature 178 is mattress that articulates with patient support panels and pivots with the panels; patient support surface 162 can act as both the bed frame when in combination with 10 and as the patient evacuation board)*

(Re Claim 16) wherein the base tray has substantially the same width as the adjustable bed. *(Page 8 lines 1-6; Fig. 2 & Fig. 22 feature 178 is mattress that articulates with patient support panels and pivots with the panels; patient support surface 162 can act as both the bed frame when in combination with 10 and as the patient evacuation board)*

(Re Claim 18) A method of evacuating a bed-ridden person from an adjustable bed having a plurality of panels that can bend relative to each other using an emergency evacuation apparatus comprising the steps of: bending so that the panels of a base tray along transverse fold lines in register with underlying panels of the adjustable bed until the panels of the base tray lie in the same plane or at a predetermined angle to each other; *(Page 9 lines 16-31 figure 7, 23, 8, and 9; Page 10 line 1- page 11 line 19 Figures 11-13; discussed here is a method of operating an evacuation system)*

Hand et al. fails to teach:

(Re claim 1) a locking means operable between an unlocked condition in which the base tray is able to bend along the transverse fold lines and a locked condition in which the base tray is unable to bend along the transverse fold lines and to provide the base tray with sufficient longitudinal rigidity to support the weight of an adult person.

(Re claim 2) wherein the mechanical locking means is comprises at least one rigid locking bolt.

(Re claim 14) locking means operable between an unlocked condition in which the base tray is able to bend along the transverse fold lines in register with the underlying panels of the adjustable bed and a locked condition in which the base tray is unable to bend along the transverse fold lines and to provide the base tray with sufficient longitudinal rigidity to support the weight of an adult person.

(Re Claim 18) operating the adjustable bed with a mechanical locking means in an unlocked condition position; and operating the mechanical locking means from the unlocked position to a locked position so that the base tray is unable to bend along the transverse fold lines providing the base tray with sufficient longitudinal rigidity to support the weight of an adult person.

Shirandami et al teaches a patient transfer board that folds and the different panels can be held and locked at different angles or in a horizontal position. This system of locking uses a rod that inserts into a hole in which the rod as protrusions that fits into cutouts in the hole (Figure 10 feature 18). This acts much like a locking bolt as the protrusions lock the rod into place inside the hole therefore locking the panel at a

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desired angle. (*Page 2 Paragraph 2 and 3; page 4 last paragraph through page 5 line 16; Figure 2, 9, 3, 10*)

In view of et Shirandami et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the patient evacuation device as taught by Hand et al.; (Re claim 1) a locking means operable between an unlocked condition in which the base tray is able to bend along the transverse fold lines and a locked condition in which the base tray is unable to bend along the transverse fold lines and to provide the base tray with sufficient longitudinal rigidity to support the weight of an adult person; (Re claim 2) wherein the mechanical locking means is comprises at least one rigid locking bolt; (Re claim 14) locking means operable between an unlocked condition in which the base tray is able to bend along the transverse fold lines in register with the underlying panels of the adjustable bed and a locked condition in which the base tray is unable to bend along the transverse fold lines and to provide the base tray with sufficient longitudinal rigidity to support the weight of an adult person; (Re Claim 18) operating the adjustable bed with a mechanical locking means in an unlocked condition position; and operating the mechanical locking means from the unlocked position to a locked position so that the base tray is unable to bend along the transverse fold lines providing the base tray with sufficient longitudinal rigidity to support the weight of an adult person, since the locking bolt (hinge) safely locks the panels in the desired position without the need of actuators or motorization therefore making it less complex to use and more cost efficient.

3. Claims 4, 5, 6, 7, 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hand et al. and Shirandami et al. in further view of Robinson et al. (GB 2324738)

The teachings of Hand et al. and Shirandami et al. were discussed above.

Hand et al. and Shirandami et al. fail to teach:

(Re Claim 4) wherein the an underside of the base tray is provided with wheels, glide members, roller balls or castors to facilitate its movement over the floor.

(Re Claim 5) wherein the wheels, glide members, roller balls or castors are fitted in channels on the underside of the base tray.

(Re Claim 6) further comprising u-shaped runners fixed to the underside of the base tray into which the wheels, glide members, roller balls or castors are fitted.

(Re Claim 17) wherein a tail-board of the adjustable bed includes rollers or fixed projections for engagement with the runners fixed to the underside of the base tray to assist in the removal of the emergency evacuation apparatus from the adjustable bed.

Robinson et al. teaches:

(Re Claim 4) wherein the an underside of the base tray is provided with wheels, glide members, roller balls or castors to facilitate its movement over the floor. (*Fig. 50 feature 44 page 18 paragraph 2*)

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(Re Claim 5) wherein the wheels, glide members, roller balls or castors are fitted in channels on the underside of the base tray. (*Fig. 57A-59A; 61,62 page 18 paragraph 2*)

(Re Claim 6) further comprising u-shaped runners fixed to the underside of the base tray into which the wheels, glide members, roller balls or castors are fitted. (*Fig. 58, 59, 56A -59A page 18 paragraph 2*)

(Re Claim 17) wherein a tail-board of the adjustable bed includes rollers or fixed projections for engagement with the runners fixed to the underside of the base tray to assist in the removal of the emergency evacuation apparatus from the adjustable bed. (*Figures 72 -75 and 47-50; page 16 paragraph 2 - page 17 end of paragraph 1; page 20 paragraph 2 – page 21 end of paragraph 1; both of these teachings discuss the removal of the evacuation apparatus over the foot of the bed where the runners and/or wheels contact the foot of the bed*)

In view of Robinson et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the patient evacuation device as taught by Hand et al. modified by Shirandami et al.; (Re Claim 4) wherein the an underside of the base tray is provided with wheels, glide members, roller balls or castors to facilitate its movement over the floor; (Re Claim 5) wherein the wheels, glide members, roller balls or castors are fitted in channels on the underside of the base tray; (Re Claim 6) further comprising u-shaped runners fixed to the underside of the base tray into which the wheels, glide members, roller balls or castors are fitted; since the

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wheels etc. allow for the option for the patient to be pulled or pushed more easily across a surface due to the friction force being decreased.

In view of Robinson et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the patient evacuation device as taught by Hand et al. modified by Shirandami et al.; (Re Claim 17) wherein a tail-board of the adjustable bed includes rollers or fixed projections for engagement with the runners fixed to the underside of the base tray to assist in the removal of the emergency evacuation apparatus from the adjustable bed; since the lateral evacuation from the bed may not be possible.

Hand et al. and Shirandami et al. fail to teach:

(Re Claim 7) further comprising straps secured to the base tray for wrapping around the person in an emergency situation to restrain the person.

(Re Claim 8) wherein the straps are provided with snap-fit couplings which permit the straps to be connected together to encircle the person prior to tightening the straps.

Robinson et al. teaches

(Re Claim 7) further comprising straps secured to the base tray for wrapping around the person in an emergency situation to restrain the person. (*Figures 6 and 2; feature 6 are the straps*)

(Re Claim 8) wherein the straps are provided with snap-fit couplings which permit the straps to be connected together to encircle the person prior to tightening the straps.

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*(Page 12 Paragraph 1 teaches 3 bar slide buckles which are a snap fit device. Page 10 Paragraph 2 line 16-18 teaches the tightening of the straps(6))*

In view of et Robinson et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the patient evacuation device as taught by Hand et al. modified by Shirandami et al.; (Re Claim 7) further comprising straps secured to the base tray for wrapping around the person in an emergency situation to restrain the person; (Re Claim 8) wherein the straps are provided with snap-fit couplings which permit the straps to be connected together to encircle the person prior to tightening the straps, since the straps ensure that patients of different statures cannot be accidentally removed from the evacuation device.

4. Claims 9, 10, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hand et al., Shirandami et al. and in further view of Laaksonen et al. (US 6061853).

The teachings of Hand et al. and Shirandami et al. were discussed above.

Hand et al. and Shirandami et al. fail to teach:

(Re Claim 9) wherein the base tray has two longitudinal folds lines defining a central panel for supporting the person and two side panels that can be bent out of the plane of the central panel by the straps.

(Re Claim 10) wherein the base tray is made of polypropylene.

(Re Claim 11) wherein the transverse and longitudinal fold lines are hydraulically pressed into the base tray.

Laaksonen teaches:

(Re Claim 9) wherein the base tray has two longitudinal folds lines defining a central panel for supporting the person and two side panels that can be bent out of the plane of the central panel by the straps. *(Figure 11 central panel is feature 1, feature 3 are the side panels; Column 4 lines 49-53)*

(Re Claim 10) wherein the base tray is made of polypropylene. *(Column 2 lines 8-10)*

(Re Claim 11) wherein the transverse and longitudinal fold lines are hydraulically pressed into the base tray. *(Column 3 lines 8-12; Figure 1 hot-pressing grooves(2) and a lateral or transverse hinge(4) is taught and hydraulic pressing can be a form of hot pressing)*

In view of Laaksonen's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the patient evacuation device as taught by Hand et al. modified by Shirandami et al.; (Re Claim 9) wherein the base tray has two longitudinal folds lines defining a central panel for supporting the person and two side panels that can be bent out of the plane of the central panel by the straps; (Re Claim 10) wherein the base tray is made of polypropylene; (Re Claim 11) wherein the transverse and longitudinal fold lines are hydraulically pressed into the base tray; since folding of the sides gives more protection to the patient and the polypropylene allows for patient not to be removed from the device for emergency X-rays.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hand et al. and Shirandami et al. in further view of Johnson et al. (US4686719).

The teachings of Hand et al. and Shirandami et al. were discussed above.

Hand et al. and Shirandami et al. fail to teach:

(Re Claim 13) further comprising at least one strip of foam fixed to an underside of the base tray.

Johnson et al. teaches longitudinally directed foam strips (36) fixed below the surface of the base board or sheet (22) of that rigidly supports the patient of a patient mover. (Column 4 line 46-58; figure 1 and 2)

In view of Robinson et al's teachings, it would have been obvious to one of ordinary skill in the art at the time of the invention to include, with the patient evacuation device as taught by Hand et al. modified by Shirandami et al.; (Re Claim 13) further comprising at least one strip of foam fixed to an underside of the base tray; so as to give support and reduce the movement of the evacuation device while it is being used on the bed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRITTANY M. WILSON whose telephone number is (571)270-5759. The examiner can normally be reached on Monday-Thursday core hours are 9:30 to 3:30 with every other Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jared Fureman can be reached on (571)272-2391. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BRITTANY M WILSON/  
Examiner, Art Unit 4184

/Jared J. Fureman/  
Supervisory Patent Examiner, Art  
Unit 4184

12/18/2008